

REMARKS

By this response, claim 30 has been cancelled; claims 1, 12 and 14 have been amended; and new claim 43 has been added, leaving claims 1-29 and 31-43 pending in the application. Reconsideration of the October 4, 2004 Official Action is respectfully requested in light of the following remarks.

Allowable Subject Matter

Applicants gratefully acknowledge the indication in the Office Action that claims 14 and 15 contain allowable subject matter. Claim 14 has been rewritten in independent form including the combined features of original claims 1 and 14. Accordingly, claims 14 and 15 are allowable. For the reasons stated below, however, Applicants submit that all pending claims are patentable.

Rejection Under 35 U.S.C. § 112

Claim 15 is rejected under 35 U.S.C. § 112, second paragraph. The reasons for the rejection are stated on page 2 of the Office Action.

The Office Action states that claim 15 is indefinite because it allegedly "recites the broad recitation of an area of bottom-side product passages, and the claim also recites essentially opposite of the metal sheet which is the narrower statement of the range/limitation." Applicants respectfully disagree.

Claim 15 recites that "in an area of bottom-side product passages, essentially opposite of the metal sheet, injection areas are disposed in the sieve bottom." Accordingly, the recitation of "essentially opposite of the metal sheet" clearly defines the locations of the injection areas in an area of bottom-side product passages. For

example, in the exemplary embodiment shown in Fig. 6b, holes 11b are provided essentially opposite to the guide sheet 35.

Applicants submit that one having ordinary skill in the art would understand the meaning of claim 15 when read in light of the specification, and thus claim 15 complies with the requirements of 35 U.S.C. § 112, second paragraph.

Therefore, withdrawal of the rejection is respectfully requested.

Objection to Claims

Claim 12 has been amended to change the term "approx." to "approximately," as suggested in the Office Action. Withdrawal of the objection is respectfully requested.

Rejections Under 35 U.S.C. § 102

Claims 1-7, 9-11, 16-19, 26-29, 31 and 33-40 stand rejected (1) under U.S.C. § 102(b) over U.S. Patent No. 5,133,137 to Petersen ("Petersen") (see page 3 of the Office Action), and (2) under U.S.C. § 102(b) over U.S. Patent No. 2,316,664 to Brassert et al. ("Brassert") (see pages 3-4 of the Office Action).

Claim 1 has been amended to recite the features of cancelled claim 30. As claim 30 was not rejected under either of these grounds of rejection, the rejections of claim 1 and dependent claims 2-7, 9-11, 16-19, 26-29, 31 and 33-40 are moot.

Therefore, withdrawal of the rejections is respectfully requested.

First Rejection Under 35 U.S.C. § 103

Claims 12-13, 21-25 and 41-42 stand rejected under 35 U.S.C. § 103(a) over Petersen or Brassert. The reasons for the rejection are stated on pages 4-5 of the Office Action.

Claims 12-13, 21-25 and 41-42 depend from claim 1. As claim 30 was not rejected under this ground of rejection, this rejection is also moot due to the amendments to claim 1.

Therefore, withdrawal of the rejection is respectfully requested.

Second Rejection Under 35 U.S.C. § 103

Claims 8, 20 and 30 are rejected under 35 U.S.C. § 103(a) over Petersen or Brassert in view of U.S. Patent No. 5,264,196 to Tanaka et al. ("Tanaka") or U.S. Patent No. 3,869,256 to Ziegler ("Ziegler"). The reasons for the rejection are stated on page 5 of the Office Action. The rejection is respectfully traversed.

Claim 1, as amended, recites a device for continuous thermal treatment of granular bulk material, which comprises, *inter alia*, "a zigzag separator disposed in a roof area of the device between a surface of the fluidized layer and a fluidization gas vent." For example, in the exemplary embodiment of the device shown in Fig. 1, a zigzag separator 12 is disposed in a roof area of the device 1 between surface 26 of the fluidized bed 23 and the gas outlet 10 in the roof area of the device. See paragraph [00043] of the specification. As explained, the fluidization gas is drawn off, after passing the zigzag separator 12, via the gas outlet 10. The zigzag separator allows fluidization gas to pass while retaining granulate particles and returning them to the fluidized bed. See paragraph [00027] of the specification.

The Examiner admits that neither Petersen nor Brassert discloses the recited zigzag separator. However, the Office Action states that Tanaka and Ziegler disclose "a zigzag alternating path (up and down) same as the applicant's." The Office Action further states that it would have been obvious to provide the fluidized bed of Petersen or Brassert with "zigzag separating walls as taught by Tanaka et al or Ziegler in order to provide a serpentine path of granulate for better exchange."

However, as explained above, the recited zigzag separator allows fluidization gas to pass while retaining granulate particles and returning the particles to the fluidized bed. In other words, the zigzag separator separates granulate particles from fluidization gas. Neither Tanaka nor Ziegler discloses such a zigzag separator.

Accordingly, because none of the applied references suggests the recited zigzag separator, even if the teachings of Petersen or Brassert were combined with the teachings of Tanaka or Ziegler, the combined teachings still would not have resulted in the combination of features recited in claim 1. To establish a *prima facie* case of obviousness, all claimed features must be taught or suggested by the applied references. See MPEP § 2143.03, page 2100-133. Thus, claim 1 would not have been rendered obvious by the applied references.

Therefore, withdrawal of the rejection is respectfully requested.

Third Rejection Under 35 U.S.C. § 103

Claim 32 stands rejected under 35 U.S.C. § 103(a) over Petersen or Brassert in view of U.S. Patent No. 3,360,867 to Sanderson. The reasons for the rejection are stated on pages 5-6 of the Office Action.

Claim 32 depends from claim 1. As claim 30 was not rejected under this ground of rejection, this rejection is also moot due to the amendments to claim 1.

Therefore, withdrawal of the rejection is respectfully requested.

New Claim

New claim 43 depends from claim 33. Support for claim 43 is provided, for example, at paragraph [00029] of the specification. Claim 43 is also patentable.

Conclusion

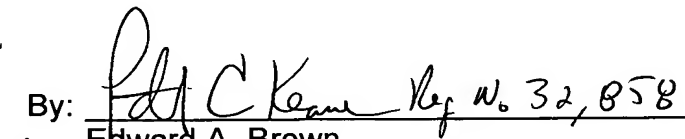
For the foregoing reasons, allowance of the application is respectfully requested. If there are any questions regarding this response, Applicants' undersigned representative can be reached at the telephone number given below.

Respectfully submitted,

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